

ABSTRACT

A technique and apparatus for integrally connecting a precast or prefabricated deck to a girder. A connection structure and method for connecting a precast or prefabricated deck to a girder, makes it unnecessary to form shear pockets in the deck and to remove existing shear connectors already installed to the girder, and makes it possible to easily adjust an elevation of the deck and to obtain excellent structural integration between the girder and the deck. The connection structure includes at least one rod shaped elevation adjustor inserted through the deck to support the deck spaced apart from an upper surface of the girder at a predetermined interval. A length of the rod shaped elevation adjustor projected toward an upper face of the girder can be changed to allow the deck to be supported. At least one shear connector is inserted through the deck. A lower portion of the shear connector extends toward the upper surface of the girder, and an upper portion of the shear connector is fastened by at least one fastener. When the deck is supported at a predetermined elevation spaced apart from the upper surface of the girder by the elevation adjustor after the deck is placed on the girder, a filler material is filled in a space between the girder and the deck to encase the lower portions of the elevation adjustor and the shear connector. The fastener is fastened to the shear connector so as to press the deck downward.